

AMENDMENTS TO THE CLAIMS

Please replace all prior versions of the claims with the following listing of the claims. Please note that in the amendments to the claims, deletions are indicated by strikethrough (e.g. ~~deletion~~) or double brackets (e.g. [[word]]) and additions to the claims are underlined (e.g. addition).

1. (Currently Amended) A[[n]] dental implant for insertion into a hole formed in jaw bone and overlying soft tissue, the dental implant comprising:

an upper portion to be placed against an upper edge of the jaw bone, ~~wherein~~
~~along at least most of its peripheral extent, the upper portion is provided with~~ comprising
at least one groove which extends all around the surface and which extends substantially
in a cross section substantially at right angles to the longitudinal axis of the implant,
~~configured to stimulate bone movement and bone ingrowth and through said bone~~
~~ingrowth form a barrier against substantial or visible subsidence, around the portion, of~~
~~the bone with overlying soft tissue~~ said groove having a cup-shaped cross section and
having a depth of between about 50 - 100 μ m and having a width of between about 70 -
160 μ m.

2. (Currently Amended) The dental implant as in claim 1, wherein each groove has
a cross section of semi-circular shape ~~the implant comprises that two or more grooves that are~~
~~substantially parallel grooves and configured to be placed against the upper edge of the jaw bone.~~

3. (Previously Presented) The dental implant as in claim 1, wherein each groove has an arc-shaped that follows a corresponding arc-shaped jaw bone.

4. (Currently Amended) The dental implant as in claim 1, wherein each groove has
~~a cup-shaped cross section, for example a cross section of semi-circular shape, hyperbola shape~~
~~or semi-elliptical shape, or a rectangular cross section with rounded corners, having a depth (D)~~
~~of between about 50-100.~~

5. (Currently Amended) The dental implant as in claim 1, wherein each groove has
~~a cup-shaped~~ rectangular cross section with rounded corners ~~and having a width (B) in the range~~
~~of between about 70-160 μ m.~~

6. (Canceled)

7. **(Previously Presented)** The dental implant as in Claim 1, wherein the ingrowth of bone into said groove prevents visible exposure of these parts.

8. **(Previously Presented)** The dental implant as in claim 1, wherein bone ingrowth established in the groove also prevents bacteria and/or organisms from passing down from the upper parts of the dental implant to the underlying parts of the dental implant.

9. **(Currently Amended)** The dental implant as in claim 1, wherein the groove ~~extends all round the dental implant and and extends substantially at a right angle to the longitudinal axis of the dental implant~~ is located at an upper part of the upper portion.

10. **(Currently Amended)** The dental implant as in claim 1, wherein the dental implant includes a groove of the ~~outer~~/upper portion that is coordinated with grooves on another portion of the dental implant.

11. **(Canceled)**

12. **(Currently Amended)** The dental implant as in claim [[1]]1, wherein the depth of the groove is about 70 μm .

13. **(Canceled)**

14. **(Currently Amended)** The dental implant as in claim 1[[3]], wherein the width of the groove is about 110 μm .

15. **(New)** A method of placing a dental implant, the method comprising:

providing an implant having an upper portion comprising at least one groove which extends around a periphery of the implant and which extends substantially in a cross section substantially at right angles to the longitudinal axis of the implant, said groove having a cup-shaped cross section and having a depth of between about 50 - 100 μm and having a width of between about 70 - 160 μm ;

installing the implant into a jaw bone of a patient; and

positioning the groove against an upper edge of the jaw bone, the groove stimulating bone movement and bone ingrowth to form a barrier against substantial or visible subsidence, around the portion, of the jaw bone with overlying soft tissue.